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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,858	04/04/2005	Massimo Paladini	CIO 002	4891
39232	7590	01/06/2006	EXAMINER	
Serafini Associates 7660 FAY AVE. STE H378 LA JOLLA, CA 92037			ZUCKER, PAUL A	
			ART UNIT	PAPER NUMBER
			1621	
DATE MAILED: 01/06/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/522,858	PALADINI ET AL.	
	<b>Examiner</b> Paul A. Zucker	<b>Art Unit</b> 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 2-4 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 2-4 and 9-12 is/are rejected.
- 7) Claim(s) 8 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 31 January 2005 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10-21-05</u>	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

**DETAILED ACTION**

***Current Status***

1. This action is responsive to Applicants' amendment of 21 October 2005.
2. Receipt and entry of Applicants' amendment is acknowledged.
3. Receipt and entry of the substitute specification is acknowledged.
4. Applicant's cancellation of claims 1 and 5-7 is acknowledged.
5. Applicant's addition of new claims 8-12 is acknowledged.
6. Claims 2-4 and 8-12 are pending.
7. The objections to the specification set forth in paragraphs 2 and 2 of the previous Office Action mailed 18 August 2005 are withdrawn in response to Applicants' submission of the substitute specification.
8. The rejections under 35 USC § 101 set forth in paragraph 5 of the previous Office Action mailed 18 August 2005 are withdrawn in response to Applicants' cancellation of the claims 5-7.
9. The rejections under 35 USC § 112, second paragraph, set forth in paragraphs 6 - 10 of the previous Office Action mailed 18 August 2005 are withdrawn in response to Applicants' amendment.
10. The rejection under 35 USC § 102 set forth in paragraphs 11 and 12 of the previous Office Action mailed 18 August 2005 is withdrawn in response to Applicants' addition of the limitation that at least one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> is not CH<sub>2</sub>PO<sub>3</sub>M<sub>2</sub>.
11. The objection to the claims set forth in paragraph 13 of the previous Office Action mailed 18 August 2005 is withdrawn in response to Applicants' amendment.

***New Rejections***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

12. Claims 2-4 and 9-12 are finally rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2, 10 and 12 recite the limitation "wherein n is a number". The definition of n as set forth in this limitation encompasses any number including negative, fractional and imaginary numbers. It is unclear how n can represent any number other than zero or a positive integer in any real organic structure. Claims 2, 10 and 12 and their dependents are therefore rendered indefinite.

***Claim Rejections - 35 USC § 102***

13. Claims 2-4, 9, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Redmore (US 4,085,134 04-1978). Redmore discloses (Column 10, line 66-column 11, line 14) the compound corresponding to the instantly claimed compound wherein  $R_1$  and  $R_3 = (CH_2)_3SO_3$  and  $R_2 = CH_2PO_3M_2$  with  $M = H$  and  $n = 1$ . Redmore discloses (Column 12, lines 53- 65) formation of the alkali metal ammonium salts. Redmore further discloses (Column 13, lines 25-54) use of the compounds as scale inhibitors and the required process step for use of the compound for sequestering

iron ions which the Examiner presumes, absent evidence to the contrary, are present in the water employed by Redmore.

***Claim Objections***

14. Claim 8 is finally objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Allowable Subject Matter***

15. Claim 8 is drawn to allowable subject matter. Claim 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter: The closest prior art Redmore discloses only a compound of the instant invention where  $n = 1$ . Redmore neither discloses nor fairly suggests compounds in which  $N$  is other than 1. Further Redmore neither discloses nor fairly suggests the deposition of these compounds on a metal surface.

***Conclusion***

16. Claims 2-4 and 8-12 are pending. Claims 2-4 and 9-12 are finally rejected. Claim 8 is finally objected to.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul A. Zucker whose telephone number is 571-272-0650. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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